

ATTACHMENT I

Scope Of Work For Interim Measures

Purpose

Interim measures are actions to control and/or eliminate releases of hazardous wastes and/or hazardous constituents at or from the Facility prior to implementation of final corrective measure(s). Interim measures must be used whenever possible to achieve the goal of stabilization. U.S. Ceramic shall furnish all personnel, materials and services necessary for, or incidental to, performing the interim measures.

Scope

Interim measures are one possible step in the corrective action program. Interim measures consist of the following components, which for clarity have been designated as sections.

Section I: Interim Measure Task - Landfill Closure

Section II: Interim Measures Workplan

- A. Interim Measures Objectives
- B. Health and Safety Plan
- C. Public Involvement Plan
- D. Quality Assurance Project Plan
- E. Data Management and Reporting Plan

Section III: Interim Measures Design Program

- A. Design Plans and Specifications
- B. Operations and Maintenance Plan
- C. Project Schedule
- D. Final Design Documents

Section IV: Interim Measures Construction Quality Assurance Plan

- A. Construction Quality Assurance Objectives

B. Inspection Activities

C. Documentation

Section V: Reports

A. Progress

B. Interim Measures Workplan

C. Final Design Documents

D. Draft Interim Measures Report

E. Final Interim Measures Report

Section VI: Proposed Schedule

Section I: Interim Measure Task - Landfill Closure

Closure of the former surface impoundment and waste pile and construction of the 2.984-acre landfill, in accordance with the approved closure plan, was not properly performed by U.S. Ceramic. Releases of hazardous wastes and/or hazardous constituents to environmental media at and in the vicinity of the former surface impoundment and waste pile have been documented in Section I of the Consent Decree.

An interim measure (IM) is necessary in order to complete the proper construction of the 2.984-acre landfill and fully investigate the documented releases of hazardous wastes and/or hazardous constituents at and in the vicinity of the landfill. The conceptual approach, including risk based closure and landfill construction activities, for completing this IM is provided in Attachment VIII (Conceptual Approach for Landfill Interim Measures).

U.S. Ceramic must prepare an IM Workplan for implementation of the conceptual approach provided in Attachment VIII. The Workplan must be submitted to U.S. EPA and Ohio EPA within 90 days of the effective date of the Consent Decree and is subject to U.S. EPA approval. The Workplan must meet the requirements of Section II below and must also include requisite landfill construction designs, an operation and maintenance plan, and a schedule for completion of landfill construction activities as required in Section III below.

U.S. Ceramic must ensure that the performance of the risk based closure addresses all applicable risk-based standards for the environmental media of concern, taking into consideration both current and future land use scenarios. For contaminants determined to pose an unacceptable risk to human health and/or the environment, U.S. Ceramic shall propose interim corrective measure(s) to eliminate the unacceptable risk. Implementation of the interim corrective measure(s) shall be consistent with the requirements of this Attachment.

U.S. Ceramic shall store, treat or dispose of solid waste and contaminated soil, sediment, and water generated during this IM task in a manner that complies with the substantive standards of RCRA. Any discharge to navigable waters or disposal of contaminated water shall comply with all relevant local, State, and Federal requirements.

Section II: Interim Measures Workplan

For the IM task required above and for additional interim measures proposed by U.S. Ceramic and/or determined to be necessary by U.S. EPA, U.S. Ceramic shall prepare an IM Workplan. The Workplan shall include the development of several plans which shall be prepared concurrently.

A. Interim Measures Objectives

The Workplan shall specify the objectives of the interim measures, demonstrate how the interim measures will abate releases and threatened releases, and to the extent possible, be consistent and integrated with any long-term solution at the facility. The Workplan will include a discussion of the technical approach, engineering design, engineering plans, schedules, budget, and personnel. The Workplan will also include a description of qualifications of personnel performing or directing the interim measures, including contractor personnel. This plan shall also document the overall management approach to the interim measures and whether a Quality Assurance Project Plan and Data Management and Reporting Plan are required for the IM.

B. Health and Safety Plan

U.S. Ceramic shall submit a Health and Safety Plan to U.S. EPA for review, although it does not require approval by U.S. EPA.

1. Major elements of the Health and Safety Plan may include:

- Facility description, including availability of resources such as roads, water supplies, electricity and telephone services;
- Description of the known hazards and evaluation of the risks associated with the incident and with each activity conducted;
- A list of key personnel and alternates responsible for site safety, response operations, and for protection of human health;
- Description of the levels of protection to be worn by personnel;
- Delineation of the work area;

- Procedures to control site access;
- Description of decontamination procedures for personnel and equipment;
- Site emergency procedures;
- Emergency medical care for injuries and toxicological problems;
- Description of requirements for an environmental surveillance program;
- Routine and special training required for response personnel; and
- Procedures for protecting workers from weather-related problems;

2. The Facility Health and Safety Plan shall be consistent with:

- NIOSH Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities (1985);
- U.S. EPA Order 1440.1 - Respiratory Protection;
- U.S. EPA Order 1440.3 - Health and Safety Requirements for Employees engaged in Field Activities;
- Facility Contingency Plan;
- U.S. EPA Standard Operating Safety Guide (1984);
- OSHA regulations particularly in 29 CFR 1910 and 1926;
- State and local regulations; and
- Other U.S. EPA guidance as provided.

C. Public Involvement Plan

All Public Involvement Plans prepared by U.S. Ceramic shall be submitted to U.S. EPA for comment and approval prior to use. U.S. Ceramic must never appear to represent or speak for the U.S. EPA before the public, other government officials, or the media.

Public Involvement activities that may be required include the following:

- Conducting an open house or informal meeting (i.e., availability session) in a public location where people can talk to Agency officials and U.S. Ceramic on a one-to-one basis;
- Preparing fact sheets summarizing current or proposed corrective action activities (all fact sheets should be reviewed by the U.S. EPA prior to public distribution);
- Communicating effectively with people who have vested interest in the corrective action activities, (e.g., providing written or verbal information in the foreign language of a predominantly non-English-speaking community); and
- Maintaining an easily accessible repository (such as a town hall or public library or the Facility itself, in some limited circumstances) of information on the facility-specific corrective action program, including the order, approved workplans, and/or other reports.

A schedule for community relations activities shall be included in the Public Involvement Plan.

D. Quality Assurance Project Plan

U.S. Ceramic shall prepare a plan to document all monitoring procedures, sampling, field measurements and sample analysis performed during interim measures so as to ensure that all information, data, and resulting decisions are technically sound, statistically valid, and properly documented. The QAPP shall be prepared in accordance with Attachment V. A pre-QAPP meeting may be held prior to preparation of the QAPP. Participants should include, but are not limited to U.S. Ceramic, their QAPP preparer, laboratory representatives, EPA Project Coordinator, and EPA Quality Assurance representatives.

E. Data Management and Reporting Plan

U.S. Ceramic shall develop and initiate a Data Management and Reporting Plan to document and track interim measures data and results. This plan shall identify and set up data documentation materials and procedures, project file requirements, and project-

related progress reporting procedures and documents. The plan shall also provide the format to be used to present the raw data and conclusions of the interim measures.

Section III: Interim Measures Design Program

A. Design Plans and Specifications

U.S. Ceramic shall develop clear and comprehensive design plans and specifications which include but are not limited to the following:

1. Discussion of the design strategy and the design basis, including:

- Compliance with all applicable or relevant environmental and public health standards; and
- Minimization of environmental and public impacts.

2. Discussion of the technical factors of importance including:

- Use of currently accepted environmental control measures and technology;
- The constructibility of the design; and
- Use of currently acceptable construction practices and techniques.

3. Description of assumptions made and detailed justification of these assumptions.

4. Discussion of the possible sources of error and references to possible operation and maintenance problems.

5. Detailed drawings of the proposed design including:

- Qualitative flow sheets;
- Quantitative flow sheets;
- Facility layout; and
- Utility locations.

6. Tables listing materials, equipment and specifications.

7. Tables giving material balances.

8. Appendices including:

- Sample calculations (one example presented and explained clearly for significant or unique design calculations);
- Derivation of equations essential to understanding the report; and
- Results of laboratory or field tests.

General correlations between drawings and technical specifications is a basic requirement of any set of working construction plans and specifications. Before submitting the project specifications, U.S. Ceramic shall coordinate and cross-check the specifications and drawings and complete the proofing of the edited specifications and required cross-checking of all drawings and specifications.

B. Operation and Maintenance Plan

U.S. Ceramic shall prepare an Operation and Maintenance Plan to cover both implementation and long-term maintenance of the interim measure. The plan shall be composed of the following elements as appropriate to the specific interim measure:

1. Equipment start-up and operator training

U.S. Ceramic shall prepare, and include in the technical specifications governing treatment systems, contractor requirements for providing appropriate service visits by experienced personnel to supervise the installation, adjustment, start-up and operation of the treatment systems and training covering appropriate operational procedures once the start-up has been successfully accomplished.

2. Description of normal operation and maintenance (O&M), including:

- Description of tasks for operation;
- Description of tasks for maintenance;
- Description of prescribed treatment or operation conditions;
- Schedule showing frequency of each O&M task; and
- Common and/or anticipated remedies.

3. Description of routine monitoring and laboratory testing, including:

- Description of monitoring tasks;
- Description of required laboratory tests and their interpretation;
- Required QA/QC; and
- Schedule of monitoring frequency and date, if appropriate, when monitoring may cease.

4. Description of equipment, including:

- Equipment identification;
- Installation of monitoring components;
- Maintenance of site equipment; and
- Replacement schedule for equipment and installed components.

5. Records and reporting mechanisms required, including:

- Daily operating logs;
- Laboratory records;
- Mechanism for reporting emergencies;
- Personnel and maintenance records; and
- Monthly/annual reports to Federal/State agencies.

The Operation and Maintenance Plan shall be submitted with the Final Design Documents or as approved in the IM Workplan.

C. Project Schedule

U.S. Ceramic shall develop a detailed Project Schedule for construction and implementation of the interim measure(s) which identifies timing for initiation and completion of all critical path tasks. U.S. Ceramic shall specifically identify dates for completion of the project and major interim milestones which are enforceable terms of this order. A Project Schedule shall be submitted simultaneously with the Final Design Documents.

D. Final Design Documents

The Final Design Documents shall consist of the Final Design Plans and Specification (100%) complete, the final Draft Operation and Maintenance Plan, and Project Schedule. U.S. Ceramic shall submit the final documents 100% complete with reproducible drawings and specifications. The quality of the design documents should be such that the U.S. Ceramic would be able to include them in a bid package and invite contractors to submit bids for the construction project.

Section IV: Interim Measure Construction Quality Assurance Plan

A. Construction Quality Assurance Objectives

In the Construction Quality Assurance (CQA) plan, U.S. Ceramic shall identify and document the objectives and framework for the development of a construction quality assurance program including, but not limited to the following: responsibility and authority; personnel qualifications; inspection activities; sampling requirements; and documentation. The responsibility and authority of all organizations (i.e., technical consultants, construction firms, etc.) and key personnel involved in the construction of the interim measure should be described fully in the CQA plan. U.S. Ceramic must identify a CQA officer and the necessary supporting inspection staff.

B. Inspection Activities

The observations and tests that will be used to monitor the construction and/or installation of the components of the interim measure(s) shall be summarized in the CQA plan. The plan shall include the scope and frequency of each type of inspection. Inspections shall verify compliance with all environmental requirements and include, but not be limited to air quality and emissions monitoring records, waste disposal records (e.g., RCRA transportation manifests), etc. The inspection should also ensure compliance with all health and safety procedures. In addition to oversight inspections, U.S. Ceramic shall conduct the following activities:

1. Preconstruction inspection and meeting

U.S. Ceramic shall conduct a preconstruction inspection and meeting to:

- Review methods for documenting and reporting inspection data;
- Review methods for distributing and storing documents and reports;
- Review work area security and protocol;
- Discuss any appropriate modifications of the construction quality assurance plan to ensure that site-specific considerations are addressed; and

- Conduct a site walk-around to verify that the design criteria, plans, and specifications are understood and to review material and equipment storage locations.

The preconstruction inspection and meeting shall be documented by a designated person and minutes should be transmitted to all parties.

2. Prefinal inspection

Upon preliminary project completion, U.S. Ceramic shall notify U.S. EPA for the purposes of conducting a prefinal inspection. The prefinal inspection will consist of a walk-through inspection of the entire project site. The inspection is to determine whether the project is complete and consistent with the contract documents and the U.S. EPA approved interim measure. Any outstanding construction items discovered during the inspection will be identified and noted. Additionally, treatment equipment will be operationally tested and U.S. Ceramic will certify that the equipment has performed to meet the purpose and intent of the specifications. Retesting will be completed where deficiencies are revealed. The prefinal inspection report should outline the outstanding construction items, actions required to resolve items, completion date for these items, and date for final inspection.

3. Final Inspection

Upon completion of any outstanding construction items, the U.S. Ceramic shall notify U.S. EPA for the purpose of conducting a final inspection. The final inspection will consist of a walk-through inspection of the project site. The prefinal inspection will be used as a checklist with the final inspection focusing on the outstanding items that have been resolved.

4. Sampling and Testing Requirements

The sampling and testing activities, sample size, sample and test locations, frequency of testing, acceptance and rejection criteria, and plans for correcting problems should be presented in the CQA.

C. Documentation

Reporting requirements for CQA activities shall be described in detail the CQA plan. This shall include such items as daily summary reports, inspection data sheets, problem identification and interim measures reports, design acceptance reports and final documentation. Provisions for the final storage of all records shall be presented in the CQA plan.

Section V: Reports

A. Progress

U.S. Ceramic shall at a minimum provide the U.S. EPA with signed, monthly progress reports containing:

1. A description and estimate of the percentage of the interim measures completed;
2. Summaries of all findings;
3. Summaries of all changes made in the interim measures during the reporting period;
4. Summaries of all contacts with representatives of the local community, public interest groups, or State government during the reporting period;
5. Summaries of all problems of potential problems encountered during the reporting period;
6. Actions being taken to rectify problems;
7. Changes in personnel during the reporting period;
8. Projected work for the next reporting period; and
9. Copies of daily reports, inspection reports, laboratory/monitoring data, etc.

B. Interim Measures Workplan

U.S. Ceramic shall submit an Interim Measures Workplan as described in Sections I, II, III, and IV.

C. Final Design Documents

U.S. Ceramic shall submit the Final Design Documents as described in Section III.

D. Draft Interim Measures Report

At the "completion" of the construction of the project (except for long-term operations, maintenance and monitoring), U.S. Ceramic shall submit an Interim Measures and Implementation Report to U.S. EPA. The Report shall document that the project is consistent with the design specifications, and that the

interim measures are performing adequately. The Report shall include, but not be limited to the following elements:

1. Synopsis of the interim measures and certification of the design and construction;
2. Explanation of any modifications to the plan and why these were necessary for the project;
3. Listing of criteria, established before the interim measures were initiated, for judging the functioning of the interim measures and also explaining any modification to these criteria;
4. Results of facility monitoring, indicating that interim measures will meet or exceed the performance criteria; and
5. Explanation of the operation and maintenance (including monitoring) to be undertaken at the facility.

This report shall include the inspection summary reports, inspection data sheets, problem identification and corrective measure reports, block evaluation reports, photographic reporting data sheets, design engineers' acceptance reports, deviations from design and material specifications (with justifying documentation) and as-built drawings.

E. Final Interim Measures Report

U.S. Ceramic shall finalize the Interim Measures Work Plan and the Interim Measures Implementation Report incorporating comments received on draft submissions.

Section VI: Proposed Schedule

U.S. Ceramic will provide U.S. EPA with IM submittals according to the following schedule:

Facility Submission	Due Date
Interim Measures Workplan -Interim Measures Objectives -Health and Safety Plan -Public Involvement Plan -Quality Assurance Project Plan -Data Management and Reporting Plan -Design Plans and Specs -O&M Plan -Project Schedule -Construction QA Plan	Within 90 days of the effective date of this Decree or within 30 days of U.S. EPA request/determination or upon written request
Final Design Documents	As outlined in the approved IM Workplan
Draft Interim Measures Report	In accordance with the project schedule approved in the IM Workplan
Final Interim Measures Report	45 days after receipt of U.S. EPA comments on Draft IM Report
Progress Reports	Monthly